



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 10

1200 Sixth Avenue, Suite 900  
Seattle, WA 98101-3140

OFFICE OF  
ECOSYSTEMS, TRIBAL AND  
PUBLIC AFFAIRS

May 10, 2010

Mr. David Navecky  
Surface Transportation Board  
395 E Street, S.W.  
Washington, D.C. 20423-0001  
ATTN: Section of Environmental Analysis  
STB Docket No. 35095

RE: EPA comments on the Draft Environmental Impact Statement for the STB Port  
MacKenzie Rail Extension Project, EPA Project # 08-011-DOT

Dear Mr. Navecky:

The U. S. Environmental Protection Agency (EPA) has reviewed the Draft Environmental Impact Statement (EIS) for the Alaska Railroad Corporation Construction and Operation of a Rail Line Extension to **Port MacKenzie, Alaska** (CEQ #20100089) in accordance with our responsibilities under the National Environmental Policy Act (NEPA) and Section 309 of the Clean Air Act. Section 309, independent of the National Environmental Policy Act (NEPA), specifically directs EPA to review and comment in writing on the environmental impacts associated with all major federal actions and the document's adequacy in meeting NEPA requirements.

The draft EIS was prepared to provide the Surface Transportation Board (STB) with information to evaluate a proposal from the Alaska Railroad Corporation (ARRC) to construct and operate approximately 35 to 40 miles of new rail line, and associated support infrastructure, with the goal of connecting Port MacKenzie to the existing rail line. The project is located within the south central portion of the Matanuska-Susitna Borough, extending from the Port MacKenzie District along upper Cook Inlet to the Parks Highway communities of Willow, Houston, Big Lake, and Wasilla. The EIS proposes eight combinations of alignment segments (alternatives) to extend the existing rail service from the vicinity of the Parks Highway. The Surface Transportation Board (STB) is the lead agency for the EIS. The Federal Railroad Administration, U.S. Army Corps of Engineers, and U.S. Coast Guard are Cooperating Agencies. Neither the ARRC nor the STB has identified a preferred alternative at this time.

In the draft EIS, STB takes a good approach to the analysis by establishing segments and associated alternatives for evaluation. Other commendable aspects of the draft EIS include a thorough discussion of mitigation measures, public and tribal involvement, consultation efforts, and the inclusion of greenhouse gas emissions analysis. We are pleased to see sponsorship of a project that will result in the efficient transport of bulk material.

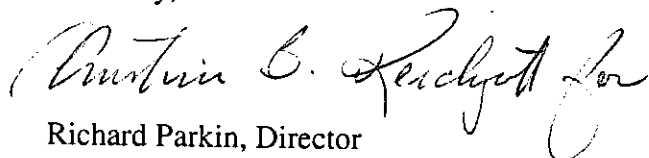
However, there are impacts associated with several of the alternatives that we believe are substantial and cause concern. EPA objects to these alternatives due to potential impacts to water quality, open water habitats, wetlands, stream channels, and riparian areas. There is not enough information to determine whether any of the alternatives comply with CWA 404 (b)(1) guidelines. Most and perhaps all of the proposed alternatives may not qualify as the least environmentally damaging practicable alternative (LEDPA); we believe that appropriate and practicable steps have not been taken to minimize potential adverse impacts on the aquatic ecosystem. We believe that the scope of this consideration was too limited and that the DEIS does not analyze other alternatives and mitigation that could reduce significant impact. Therefore, EPA has concluded that this project violates Clean Water Act Section (CWA) 404(b)(1) guidelines and the NEPA regulations at 40 C.F.R. part 1502.14, and that other alternatives need to be considered before filling waters of the U.S.

We are also concerned about reduction in ecological connectivity and habitat fragmentation from rail line and road construction and operation, as well as proposed waterbody crossings. We believe that there is insufficient information regarding the purpose and need for the project, as well as impacts related to potential material sites and construction staging areas. There is inadequate discussion of potential, disproportionate impacts to vulnerable populations, and lack of meaningful involvement, particularly regarding subsistence. The draft EIS also does not consider visual impacts from the project. Finally, EPA questions the need for a maintenance road to run the length of the line given that ARRC rail line is operated and maintained without such a road in other areas. We encourage STB to continue to refine segment alternatives for the final EIS in order to minimize these impacts in final preferred route development.

Due to these concerns, we have assigned an overall rating of EO-2 (Environmental Objection-Insufficient Information) to the draft EIS. This rating and a summary of our comments will be published in the *Federal Register*. A copy of the rating system used in conducting our review is enclosed for your reference. Additionally, we have rated each action alternative in our enclosed detailed comments.

Thank you for the opportunity to review this draft EIS. If you would like to discuss these comments, please contact Jennifer Curtis of my staff in Alaska at (907)271-6324 or [curtis.jennifer@epa.gov](mailto:curtis.jennifer@epa.gov).)

Sincerely,



Richard Parkin, Director  
Office of Ecosystems, Tribal and Public Affairs

Enclosures

## **EPA DETAILED COMMENTS ON THE SURFACE TRANSPORTATION BOARD PORT MACKENZIE RAIL EXTENSION PROJECT DRAFT EIS**

### **Purpose and Need**

In our March 21, 2008, scoping comments, EPA advised the STB that the EIS should include a clear and concise statement of the underlying purpose and need for the proposed action, and clearly reflect the greater public need for the project. The draft EIS does include such statements, but does not provide any quantitative or qualitative data to support the identified project utility and need, such as anticipated customers or freight volume projections. For instance, it would be helpful if the EIS explained how bulk materials are currently being imported or exported, at what costs, and how this project will improve this transport for customers. We recommend that such information be included in the final EIS.

The draft EIS does not discuss the existing bulk material export capability of the Ports of Seward and Whittier, which concerns the need for the project, or the potential for Port MacKenzie to be handling materials normally handled by the other ports, and the potential impacts to those communities. We are also concerned that currently the project description does not include a discussion of potential connection(s) to some conveyor or transport system (other than truck, which requires multiple transfers thus increasing costs and negating the need for reducing transport costs). There is mention of an interest in developing this connection, however. We believe that such a project, to fulfill the stated project purpose and need, should be considered as a connected action in the final EIS. If the project does not include a physical connection to the Port, we recommend that the stated purpose and need be further refined to clearly address this gap. We do appreciate the discussion of the economic benefit or comparability with the current highway travel in the draft EIS, however.

### **EPA Rating for Each Alternative**

EPA recognizes that the STB and ARRC did not identify a preferred alternative for each of the project segment combinations (alternatives). As such, EPA reviewed and evaluated each of the proposed alternatives and provided a rating for each. These ratings are listed in the table below.

<b>Alternative</b>	<b>Environmental Impacts</b>	<b>EPA Rating</b>
Mac West-Conn 1-Willow	Impacts to: local soils (510 acres lost), water resources (requiring approx. 45 structures), 11 identified floodplains, 363 acres of wetlands, 1,272 acres habitat, 2,847 acres core habitat, 16 fish bearing streams (7 anadramous)	EO
Mac West-Conn 1-Houston-Houston North	Impacts to: local soils (297 acres lost), water resources (requiring approx. 51 structures), 10 identified floodplains, 478 acres of wetlands, 1,038 acres habitat, 2,592 acres core habitat, 18 fish bearing streams (9 anadramous)	EO
Mac West-Conn 1-Houston-Houston South	Impacts to: local soils (312 acres lost), water resources (requiring approx. 40 structures), 9 identified floodplains, 424 acres of wetlands, 1,032 acres habitat, 3,210 acres core habitat, 13 fish bearing streams (6 anadramous)	EO

Mac West-Conn 2-Big Lake	Impacts to: local soils (317 acres lost), water resources (requiring approx. 42 structures), 6 identified floodplains, 347 acres of wetlands, 1,056 acres habitat, 2,631 acres core habitat, 12 fish bearing streams (8 anadramous)	EO
Mac East-Conn 3-Willow	Impacts to: local soils (608 acres lost), water resources (requiring approx. 30 structures), 9 identified floodplains, 188 acres of wetlands, 1,249 acres habitat, 2,675 acres core habitat, 13 fish bearing streams (6 anadramous)	EO
Mac East-Conn 3-Houston-Houston North	Impacts to: local soils (390 acres lost), water resources (requiring approx. 36 structures), 8 identified floodplains, 301 acres of wetlands, 1,010 acres habitat, 2,419 acres core habitat, 15 fish bearing streams (8 anadramous)	EO
Mac East-Conn 3-Houston-Houston South	Impacts to: local soils (406 acres lost), water resources (requiring approx. 25 structures), 7 identified floodplains, 248 acres of wetlands, 1,003 acres habitat, 3,038 acres core habitat, 10 fish bearing streams (5 anadramous)	EO
Mac East-Big Lake	Impacts to: local soils (322 acres lost), water resources (requiring approx. 26 structures), 5 identified floodplains, 209 acres of wetlands, 930 acres habitat, 1,725 acres core habitat, 10 fish bearing streams (8 anadramous)	EC
No Action	Impacts to: local soils (0 acres lost), water resources (requiring approx. 0 structures), 0 identified floodplains, 0 acres of wetlands, 0 acres habitat, 0 acres core habitat, 0 fish bearing streams (0 anadramous)	LO

We have rated seven of the eight alignment alternatives as Environmental Objection based on the potential for significant impacts to water resources (water quality, open water habitats, wetlands, stream channels, and riparian areas) as well as impacts to terrestrial habitat and habitat connectivity. Overall, based on the information in the DEIS, EPA believes that the Mac East-Big Lake alternative would cause the least overall environmental impact to resources.

However, there is a great deal of missing information for this and all of the alternatives. For example, there is not enough information to determine whether any of the alternatives comply with CWA 404 (b)(1) guidelines. Most and perhaps all of the proposed alternatives may not qualify as the least environmentally damaging practicable alternative (LEDPA); we believe that appropriate and practicable steps have not been taken to minimize potential adverse impacts on the aquatic ecosystem. We believe that the scope of this consideration was too limited and that the DEIS does not analyze other alternatives and mitigation that could reduce significant impact. Therefore, EPA has concluded that this project violates CWA Section 404(b)(1) guidelines and the NEPA regulations at 40 C.F.R. part 1502.14, and that other alternatives need to be considered before filling waters of the U.S.

We believe that regardless of alignment, there are adjustments that can be made to provide better protection or further minimize impacts to various resources, particularly aquatic resources such as wetlands, floodplains, and habitat. Examples of minimization measures include the elimination of a service road along portions of the project, the use of full span bridges

at stream crossings, and elevating portions of the track to reduce impacts to wetlands, floodplains, wildlife movement, habitat, and recreation. The incorporation of minimization measures into the alternatives should be documented in the final EIS, and the extent and effect of the measures (e.g., length of elevated track) quantified to facilitate comparisons between alternatives.

It is unclear in the DEIS if earlier efforts were undertaken to avoid, to the maximum extent practicable, impacts to waters of the U.S. If such an alignment exists, and is reasonable and practicable, it should be evaluated in the final EIS. We recognize that CEQ's "NEPA's Forty Most Asked Questions" guidance document states that "reasonable alternatives include those that are practical or feasible from the technical and economic standpoint". However, it does not limit a lead agency's consideration of additional criteria, such as those criteria under the CWA 404(b)(1) guidelines. In fact, the express intent of the CEQ's guidelines and of NEPA itself (Section 102 (B)) is to require federal agencies to ensure that environmental factors receive sufficient consideration in decision-making.

The CEQ regulations at 40 CFR Part 1500.1(c) note that NEPA is intended to help agencies "take actions that protect, restore, and enhance the environment." In the same Section, sub-paragraph (f) instructs that we should "use all practicable means ...to avoid or minimize any possible adverse effects of their actions upon the quality of the human environment. 40 CFR 1500.3 states that the "provisions of the Act and of these regulations must be read to together as a whole in order to comply with the spirit and letter of the law." It is clear that the intent of NEPA is for agencies to incorporate environmental considerations into all phases of project planning.

The CWA §404(b)(1) Guidelines (Guidelines) even more explicitly require proponents to consider environmental criteria in project development. The Guidelines require, in part, that *no discharge of dredged or fill material shall be permitted if there is a practicable alternative to the proposed discharge which would have less adverse impact on the aquatic ecosystem.* The guidelines define "practicable" as "available and capable of being done after taking into consideration cost, existing technologies and logistics in light of overall project purposes."

The Guidelines contain an explicit, overarching presumption that if a discharge does not "require ...siting within (a) special aquatic site ... to fulfill its basic purpose (i.e., is not 'water dependent'), practicable alternatives that do *not* involve the discharge of dredged or fill material into special aquatic sites" are available and would result in fewer environmental impacts.

The burden of proof is on an applicant to rebut this presumption by demonstrating that there are no practicable alternatives before a discharge can be permitted. We are concerned that the draft EIS contains insufficient information to demonstrate that any of the alignment alternatives represent the least environmentally damaging practicable alternative (LEDPA). Limiting the selection of alternatives to only those which consider operational or other regulatory criteria, would not, in our view, be consistent with the Guidelines because the presumption would remain, and opportunities to avoid discharge into a special aquatic site would not be fully explored. Because of this, we recommend that STB consider additional alignments to maximize avoidance of waters of the U.S.

For example, the 2003 corridor analysis included an alignment that followed the Port MacKenzie Road and Knik-Goose Bay Road. Table 2-1 includes a brief discussion of why that alignment was not included in the draft EIS. It does not appear, however, that an alignment between the current Big Lake segment and Knik-Goose Bay Road was evaluated. Such an alignment could possibly swing east and then north in a broad curve, taking advantage of higher ground, and connect with the mainline near the proposed location for the current Big Lake segment.

The Guidelines also require that “no discharge of dredged or fill material shall be permitted unless appropriate and practicable steps have been taken which will minimize potential adverse impacts of the discharge on the aquatic ecosystem.” [40 CFR §230.10(d)]. We believe that, absent substantial efforts to avoid and minimize project impacts, the construction and operation of a rail line extension to Port MacKenzie may result in substantial and unacceptable impacts on aquatic resources of national importance (ARNIs). The Susitna and Little Susitna rivers, Willow Creek, and Knik Arm all support fishery and wildlife resources that are of statewide and national importance. The project area also includes several large wetland complexes which provide hydrologic and ecological support for these ARNIs. We believe that measures such as elevating portions of the rail line are practicable and should be considered where appropriate to minimize impacts to aquatic resources. We question whether an alternative without such measures could be demonstrated as being the LEDPA in compliance with the Guidelines.

For example, the proposed tie-in of the Big Lake segment to the ARRC mainline through the Cheri Creek wetlands does not appear to include any measures to minimize impacts to the stream and adjacent wetlands. We do not believe that the relocation of 2,460 feet of this anadromous stream and construction of the rail embankment, staging area, and access road on solid fill could be demonstrated to represent the LEDPA.

EPA also recommends that the final EIS include a preliminary 404(b)(1) evaluation so that the public can review and comment on it prior to publication of the Record of Decision (ROD). A preliminary 404(b)(1) evaluation would assist in streamlining the 404 permitting process. In addition, the final EIS should discuss and propose compensatory mitigation for all unavoidable impacts to the aquatic environment.

The draft EIS contains very limited information regarding wetland function, and this information is not site-specific. Additional, detailed, site-specific information regarding wetland type and functions will be necessary to compare the environmental impacts of the various alternatives. This is necessary to identify the LEDPA and establish that all practicable steps have been taken to minimize impacts to aquatic resources.

### **Adequacy of the Draft EIS**

We believe that the draft EIS does not contain sufficient information to fully assess environmental impacts that should be avoided in order to fully protect the environment. EPA has assigned a rating of “2” (Insufficient Information) to the adequacy of the draft EIS. As indicated above, we have identified potential alternative alignments that are within the spectrum of alternatives analyzed in the draft EIS, which could reduce the environmental impacts of the

proposal. We have identified additional information, data, analyses, or discussion that should be included in the final EIS to meet the requirements of Section 404 of the CWA.

### **Evaluation of Subsistence Impacts and Environmental Justice**

The draft EIS defines subsistence (Section 2.4.5) as the "customary and traditional uses of wild and renewable resources for food, shelter, food, clothing, and other uses" but then goes on to state that since no federally or state designated subsistence areas are located in the project area, impacts to subsistence are only indirect. It is important to note that many residents in south central Alaska practice subsistence activities (as defined by the draft EIS) in the project area and utilize resources that may be impacted by this project. Because subsistence activities do occur in the project area, the conclusion that impacts are only indirect does not reflect the actual activities currently occurring in the project area. We recommend that the final EIS be revised to reflect the subsistence activities, even if different terminology is required, that are occurring in the project area, and that the impacts to those activities, both direct and indirect, be clearly identified.

It is also important to note that Executive Order (EO) 12898 specifically identifies impacts to subsistence as necessitating special treatment. Specifically, Section 4-401 of the EO states "In order to assist in identifying the need for ensuring protection of populations with differential patterns of subsistence consumption of fish and wildlife, Federal agencies, whenever practicable and appropriate, shall collect, maintain, and analyze information on the consumption patterns of populations who principally rely on fish and/or wildlife for subsistence. Federal agencies shall communicate to the public the risks of those consumption patterns." If such populations occur in the project area, and their subsistence activities could be impacted by this project, we recommend that this type of information be collected and integrated into the final EIS.

We note that some alternatives, even the more environmentally preferable Mac East-Big Lake alternative, have potential to cause substantial impacts to private property and/or cultural resources. We are particularly concerned about such impacts if the private property owners meet the criteria of disadvantaged populations. We recommend that there be additional analysis of these communities. We also recommend that steps be taken to ensure that potentially affected communities have meaningful involvement in the process.

### **Bridge and Culvert Designs**

To the extent that they are compatible with standards used by the permitting agencies, EPA supports use of the National Marine Fishery Service (NMFS) Anadromous Salmonid Passage Facility Design criteria for all crossings as referenced in the draft EIS. The key point in this design criteria is that all crossings should maintain the normative physical processes within the stream-floodplain-riparian corridor by: 1) promoting natural sediment transport patterns, 2) providing unaltered fluvial debris movement, and 3) restoring or maintaining functional longitudinal continuity and connectivity of the stream-floodplain-riparian corridor. EPA recommends that to avoid and minimize impacts to aquatic resources to the maximum extent practicable, all crossings should consist of a bridge or stream simulation culvert spanning the stream floodplain, providing long-term dynamic channel stability, retention of existing spawning areas, maintenance of food (benthic invertebrate) production, and minimized risk of failure. All crossing designs should be based on site-specific information such as: estimates of peak discharge, flow velocities and patterns; channel stability; sediment and bed load transport;

flooding regime (50-year to 100-year flood frequency and magnitude); cross-section profiles of channel morphology and water surface elevations, etc. This information should be included in the final EIS.

### **Temporary Construction Camp, Material Source Sites, and Staging Areas**

We request that the final EIS identify locations and area (acres) for temporary construction camp(s), potential material source sites (if undeveloped sites are considered), waste sites, and staging areas, including sites for storage, rock crushing, other material processing equipment, and equipment turnaround areas. The location of material source sites should be identified, including quantity of materials (cubic yards).

### **Monitoring and Adaptive Management**

Monitoring is important to assess the accuracy of predictions of effects and to ensure the success of mitigations. In addition, monitoring provides the means to identify the need for modifying (increasing or decreasing) mitigation. Adaptive management provides the flexible program for achieving these changes to mitigation. We recommend that the final EIS include a section that describes all of the proposed monitoring that would be necessary to implement the preferred alternative, and any adaptive management strategies that would be employed.

### **Evaluation of Visual/Aesthetic Impacts**

Currently there is little consideration of impacts to visual resources or aesthetics outside of the context of cultural and historic resources, and there is no justification offered for the dismissal of visual impacts in the draft EIS. If visual resources, such as scenic vistas, viewscapes or panoramic views, occur in the project area and could be impacted by the project, the final EIS should include an analysis of such impacts and offer mitigation for such impacts. Otherwise, an explanation of why the issue was excluded from the EIS should be offered.

### **Figures**

Many figures provided in the draft EIS do not provide a level of detail that is necessary to visually determine the extent or types (in some cases) of resources affected by the proposed alternatives. For example, impacts to property types are not represented in any figure in any detail. Many of these resource maps have been developed for ARRC previously, however, and are in the public domain. We recommend that the STB consider incorporating available figures into the final EIS to provide better visual representation of resources and resource impacts if appropriate.

### **Indirect and Cumulative Effects Analysis**

The cumulative impacts discussion does not currently include reasonably foreseeable coal mining activities in Wishbone Hill area, or the development of compressed or liquefied natural gas storage/export facilities that are being planned for the Port MacKenzie area. Since these projects, which are in or in the general vicinity of the project area, could result in the production of a bulk commodity that could be exported from the Port, or displace components of this project, we believe they should be considered in the cumulative impacts section. In addition, if the Wishbone Hill mining plans include rail export (thus a potential customer of the proposed project), or if current Usibelli coal could be diverted from Seward, the impacts from that coal transport (i.e. fugitive coal dust) may need to be considered in the indirect effects analysis.



### **Rail Line Access Road**

As discussed above, the draft EIS indicates that ARRC is interested in constructing a road paralleling the entire length of the rail line extension, to be constructed before, and for the purpose of, aiding in the construction and maintenance of the rail line. The document does not, however, explain that other sections of rail line throughout the state do not require such a road, and that maintenance can be performed from the rail line itself via hi-rail equipment (such as in the Chugach National Forest). We continue to have concerns that such roads may not be necessary and as such impacts from such a road are clearly avoidable. We recommend that the final EIS discuss alternatives that eliminate or minimize the access road.

### **Hazardous Wastes Associated with Known Contaminated Sites**

Although EPA has identified the Mac East-Big Lake alternative as the alternative with the least environmental impacts, and our preferred alternative, we also recognize the potential for encountering hazardous wastes associated with the former Susitna Gunnery Range. Since the actual extent of the contamination is not fully identified at this time, we recommend additional analysis be conducted to determine the extent of the contamination. We also recommend that a Hazardous Waste Mitigation Plan be developed for this site prior to construction if this alternative is carried forward for the Board's consideration in the Record of Decision. We recommend that this plan be developed in close coordination with our agency as well as the Alaska Department of Environmental Conservation Contaminated Sites Program.

### **Emergency/Accident Response and Impacts**

The STB has determined that the potential for hazardous material spills from leaks, derailment or collisions is "low" and "unlikely", and only a "slight possibility". The evaluation of potential impacts on various resources also only considers small leaks as opposed to catastrophic failures. While STB is not required to consider a worst case scenario under NEPA, there is no evaluation of ARRC accidents and incidents in the EIS to determine if ARRC's history supports these conclusions.

For instance, there have been numerous ARRC incidents and derailments in the last three decades that have resulted in hundreds of thousands of gallons of fuel released and multiple railcar loads of coal spilled (Dunbar, Curry, Gold Creek, Canyon, etc.). Past ARRC fuel spills have demonstrated that when a major spill does occur, such as the December 1999, Gold Creek spill, response is often slowed or complicated by remoteness of the site, as well as limitations in spill response resource availability, and the resulting impacts can be substantial. Given that ARRC trains contain up to 125 cars, and fuel tanker cars contain up to 23,000 gallons of fuel per car, a worst case scenario derailment or collision could result in hundreds of thousands of gallons of product being released into the environment, which could immediately contaminate a major surface water body. We recommend that that STB reconsider the conclusion that a hazardous material spill or release will result in low impacts given that low frequency and probability does not affect magnitude of the impact should such a spill occur.

## Specific Comments

- Pages 2-1, 2-7 Maximum design speed is listed at 60 mph but operational speed (Class 4) is 40 mph. Please explain this discrepancy. Also, if analysis does not consider higher speed with regard to safety and impacts, it should be revised.
- Page 13.1-11 Please provide additional information of the condemnation process, and anticipated impacts from this process.
- Page 16-14 Please revise the discussion of temperature changes to reflect that global temperatures have risen 1.5°F since 1900, not 1990.
- Page 19-1 We continue to have concerns regarding STB's use of this term. Although we understand it is part of the applicant's process, we continue to believe that the use of this term is misleading to the public.

**U.S. Environmental Protection Agency Rating System for  
Draft Environmental Impact Statements  
Definitions and Follow-Up Action\*  
Environmental Impact of the Action**

**LO – Lack of Objections**

The U.S. Environmental Protection Agency (EPA) review has not identified any potential environmental impacts requiring substantive changes to the proposal. The review may have disclosed opportunities for application of mitigation measures that could be accomplished with no more than minor changes to the proposal.

**EC – Environmental Concerns**

EPA review has identified environmental impacts that should be avoided in order to fully protect the environment. Corrective measures may require changes to the preferred alternative or application of mitigation measures that can reduce these impacts.

**EO – Environmental Objections**

EPA review has identified significant environmental impacts that should be avoided in order to provide adequate protection for the environment. Corrective measures may require substantial changes to the preferred alternative or consideration of some other project alternative (including the no-action alternative or a new alternative). EPA intends to work with the lead agency to reduce these impacts.

**EU – Environmentally Unsatisfactory**

EPA review has identified adverse environmental impacts that are of sufficient magnitude that they are unsatisfactory from the standpoint of public health or welfare or environmental quality. EPA intends to work with the lead agency to reduce these impacts. If the potential unsatisfactory impacts are not corrected at the final EIS stage, this proposal will be recommended for referral to the Council on Environmental Quality (CEQ).

**Adequacy of the Impact Statement**

**Category 1 – Adequate**

EPA believes the draft EIS adequately sets forth the environmental impact(s) of the preferred alternative and those of the alternatives reasonably available to the project or action. No further analysis of data collection is necessary, but the reviewer may suggest the addition of clarifying language or information.

**Category 2 – Insufficient Information**

The draft EIS does not contain sufficient information for EPA to fully assess environmental impacts that should be avoided in order to fully protect the environment, or the EPA reviewer has identified new reasonably available alternatives that are within the spectrum of alternatives analyzed in the draft EIS, which could reduce the environmental impacts of the action. The identified additional information, data, analyses or discussion should be included in the final EIS.

**Category 3 – Inadequate**

EPA does not believe that the draft EIS adequately assesses potentially significant environmental impacts of the action, or the EPA reviewer has identified new, reasonably available alternatives that are outside of the spectrum of alternatives analyzed in the draft EIS, which should be analyzed in order to reduce the potentially significant environmental impacts. EPA believes that the identified additional information, data, analyses, or discussions are of such a magnitude that they should have full public review at a draft stage. EPA does not believe that the draft EIS is adequate for the purposes of the National Environmental Policy Act and or Section 309 review, and thus should be formally revised and made available for public comment in a supplemental or revised draft EIS. On the basis of the potential significant impacts involved, this proposal could be a candidate for referral to the CEQ.

\* From EPA Manual 1640 Policy and Procedures for the Review of Federal Actions Impacting the Environment. February, 1987.